

Position Description - Final

PD #:  
Sequence #:

Replaces PD #:

IT Specialist (SYSADMIN)  
GS-2210-12

Installation:

Major Command:  
Region:

Citation 1: OPM, JFPCS Administrative Work in the Information Technology Group, GS-2200,  
dtd. May 2001 (Series Coverage, GS-2210)

PD Library PD:  
COREDOC PD:

Classified By:  
Classified Date:

FLSA:  
Career Program:  
Functional Code:  
Competitive Area:  
Competitive Level:

Drug Test Required:  
Financial Disclosure Required:  
Requires Access to Firearms:  
Position Sensitivity:  
Emergency Essential:

CIPMS PD:  
Acquisition Position:  
Interdisciplinary:  
Target Grade/FPL:  
Career Ladder PD:

PD Status:

MAJOR DUTIES

Summary: Serves as the Technical Expert within the District responsible for planning and coordination of the installation, testing, operation, troubleshooting, and maintenance of District IT hardware and software system; and managing systems resources including performance, capacity, availability, serviceability, and recoverability; thereby ensuring system availability, functionality, integrity, and efficiency. In this capacity, performs the following duties:

1. Serves as a District IT Specialist responsible for System Administration planning, coordination, modification, implementation, and troubleshooting to support District customer needs. Operations, maintenance, and support of servers with client based computers located throughout the District. Work pertains to the administration of all systems, including a myriad of associated hardware/software and numerous interfaces, included in the District Local Area Network (LAN) and Wide Area Network (WAN).

a. Exercises technical responsibility for all aspects of District IT system support. Plans and

schedules the installation of new or modified hardware, operating systems, and software applications. Directs testing of vendor-provided software. Directs continuing review of District hardware and software ensuring that it is responsive to District user needs. Administers account, network rights, and access to systems and equipment. Administers system resources, the installation and integration of systems fixes and workarounds, updates, and enhancements including performance, capacity, availability, serviceability and recoverability. Develops and documents local systems administration standard operating procedures. Ensures the rigorous application of information security/information assurance policies, principles, and practices in the delivery of systems administration services. Maintains systems configuration as well as resolves hardware/software interfaces and interoperability problems. Develops software procedures for use by the operations staff. Evaluates machine usage and on the basis of current usage patterns, develops plans for the necessary acquisition to support future District automation (hardware and software). Advises other IT Specialists within the Information Management (IM) organization as to system level errors and the available hardware and software procedures necessary for the correction of system errors. Implements systems software changes and new operating system releases and maintains the operational status of systems by isolating errors and in concert with vendors technical staff, develops solutions to either hardware or software malfunctions. Develops, coordinates, and implements plans for the recovery of system data in the event of hardware or software failure. Provides interpretations of higher authority regulations and guidance concerning systems administration and coordinates with higher-level U.S. Army Corps of Engineers (USACE) levels concerning the resolution of problem areas encountered.

b. Provides advisory services to other IM Specialists and top-level management in other District organizations in implementing approved automated systems. Develops automated programs, using appropriate computer languages, needed to process planned automated systems. Analyzes planned logic and workflow through the computer and related equipment and develops planned approaches or revisions as necessary. Develops and coordinates the development of sample test data needed to simulate all possible conditions designed into the planned automated systems. Runs or coordinates related debugging and problem resolution. Ensures that complete programs will utilize the minimum amount of computer and related equipment processing time consistent with system objectives. Develops detailed operating instructions for IT equipment. Reviews and authorizes all significant deviations from previously approved automated systems. Plans, coordinates, documents, and implements periodic reviews of installed automated systems to determine if approved systems plans have been effectively installed and to ensure that planned technical, economic or other benefits are being achieved. Ensures that District customers are provided the most current versions of applicable software as they become available. Develops and recommends revisions to planned systems or develops and authorizes the use of systems deviations that will facilitate achievement of planned objectives. Prepares reports pertinent to follow-up findings and makes oral and written presentations to District IM managers and District organization users.

2. Coordinates with specialists and managers at higher USACE levels to obtain information to

interface with systems at those levels to facilitate the acquisition and exchange of information technology. Serves as the District representative at District and Division meetings and seminars designed to arrive at solutions to mutual systems administration problems encountered and to provide knowledge and information concerning state-of-the-art techniques, software, and hardware.

3. Develops guidelines, standard operating procedures (SOPs), bulletins and flyers concerning the operation/use of District IT system, services, and activities. Frequently analyzes problematic provisions or guidance governing standard operating systems and provides assistance and advisory services to any and all District users concerning the resolution of problem areas and the policies, regulations, and provisions of systems. Provides interpretations of higher authority regulations and guidance concerning IT system activities/service and coordinates with higher-level USACE levels concerning the resolution of problem areas encountered.

4. Assigns system administration studies or portions of studies and program development to lower-grade IT specialists and/or analysts hired under contract. Technically reviews completed work projects and provides technical assistance and guidance as required. May be required to manage contracts with private computer firms concerning the studies. In this capacity, prepares scopes of work and cost estimates for the work to be contracted; ensures that the contractors' progress complies with contract terms; certifies work accomplishment, reviews and approves requests for payments; ensures compliance with the terms and provisions of contracts and compliance with specifications; recommends approval or disapproval of completed contractor work; and takes necessary action to resolve problematic issues. Within the District's IT policy and planning function, incumbent accomplishes technical, analytical and advisory functions pertinent to the development of local policies, plans, and processes, and ensures that the District's IT program is in compliance with higher authority, policies, and guidelines.

Performs other duties as assigned.

FACTOR 1. Knowledge Required by the Position	FL 1-7	1250 Points
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Knowledge of a wide range of IT standards, principles, concepts, methods, policies, and authorized approaches for IT as well as the full variety of District applications, operating systems and components, protocols, and the hardware and software used in District organizations in order to conduct system administration functions and study District IT system problems and identify/develop and implement the best methods, procedures, and processes to resolve such problems, reduce and minimize disruptions in critical user business activities and to provide the most effective support for District users. Knowledge of the provisions and state-of-the-art IT hardware and software and approaches to networking and interfaces as well as the District's existing IT infrastructure to determine their applicability and susceptibility for use with the District to resolve recurring problems.

Knowledge of the organizational structures, functions, work processes/programs of District organizations, as well as a high degree of analytical ability to gather, assemble, and analyze

facts, draw conclusions, and devise solutions to problems which will increase the effectiveness of the District business process. Knowledge of cost benefit analysis to analyze and study current and desired systems and recommend the most cost-effective systems for local application. Knowledge of and experience in the use of oral and written communication methods and techniques to accomplish continuing coordination with District customers.

Knowledge of and skill in applying principles and methods for integrating information systems components; performance tuning tools and techniques and systems diagnostic tools and fault identification techniques sufficient to install and maintain software and hardware, control current versions and future releases of software applications; optimize the functionality of networks and systems and diagnose and recover failed systems.

**FACTOR 2. Supervisory Controls**

**FL 2-4**

**450 Points**

The supervisor assigns functional responsibilities, outlines overall objectives to be achieved, and the resources available for use. Assignments may come directly from the user/customer or from the supervisor. The incumbent has continuing responsibility for assignments pertaining to the District system administration activities. Consults with the supervisor on matters pertaining to time frames, scopes of assignments, stages in the study or application process and possible approaches on controversial or problematic situations. Independently applies and interprets guidelines and regulations and plans, designs, and organizes projects associated with assignments. There is a continuing requirement for coordination (users and other impacted IT specialists) and the incumbent independently plans and carries out the necessary coordination including that involving lower-level IT specialists and/or efforts of contractually employed persons. The incumbent represents the highest level of expertise within the District concerning system administration matters and independently provides advice and guidance within the District and resolves problem matters. Completed work is typically accepted without technical change but is reviewed for effectiveness in meeting user requirements, conformance with policy, accomplishment within acceptable time frames, and customer satisfaction.

**FACTOR 3. Guidelines**

**FL 3-4**

**450 Points**

Guidelines include agency regulations, manuals, and policies which provide overall goals and define limitations and overall objectives; USACE regulations, policies and procedures concerning system administration activities and all automated systems used in USACE; District regulations and guidelines; and a variety of manufacturers' manuals and handbooks pertaining to the wide range of hardware and software in use in the District. Guides are broad and frequently require interpretations and deviation from previously used methods. On a regular basis the incumbent must use ingenuity in adapting existing methods and developing new methods and approaches to resolve user problems and requirements within the provisions of policies and regulations. The incumbent must interpret higher authority guidelines, considering the intricacies and problems encountered in accommodating District information needs, and develop local guides, SOP's, bulletins and fact sheets for distribution and use within the District in performing system administration operation and maintenance. The incumbent must apply

judgment to anticipate problems, research trends in state-of-the-art technology, and develop special coding to satisfy requirements.

**FACTOR 4. Complexity**

**FL 4-5**

**325 Points**

Assignments involve the accomplishment of complete system studies requiring in-depth analysis of a myriad of complex system administration factors and many different and unrelated processes and methods. Additionally, work includes the responsibility for serving as the District point of contact concerning system administration needs and problem resolution. Work is made complex by continuing changes in District business requirements and the rapidly changing IT environment. The incumbent must remain updated on changing technology and continuously evaluate changing future organizational information needs. The incumbent must develop new strategies, methods and techniques for accommodation of customer needs and for application to resolve incompatibilities between organizational needs and ways of doing business and automated system requirements. Projects require the consideration of numerous USACE-wide standard systems and hardware platforms requiring the use of a variety of techniques and methods to design and evaluate alternatives to best fit District requirements.

**FACTOR 5. Scope and Effect**

**FL 5-4**

**225 Points**

The work involves serving as the technical expert within the District concerning system administration needs, plans, situations and problems. The work involves troubleshooting, developing and refining services and consulting with program specialists in developing new services and/or enhancing existing services that expand current information dissemination capabilities. The work also involves planning, coordinating, and conducting/directing in-depth studies of District system administration needs, services/activities, and developing strategies and plans to satisfy those needs leading to the implementation of new/enhanced systems/sites, etc.

The work facilitates the efficient delivery of program information and exchange of information between clients and organizations (e.g., within the District, with other districts, USACE, other agencies, and the private sector).

**FACTOR 6. Personal Contacts**

**Fl 6-3 & 7-C**

**180 Points**

**FACTOR 7. PURPOSE OF CONTACTS**

Contacts are with IM Managers and Specialists within the employing District organizations; technical specialists in similar specialties in other Districts; managers and technical experts/specialists in the Division HQ offices; with HQ USACE specialists and functional proponents of major Corps corporate systems, and IT experts; and occasional contacts with IT experts at the DA level and other Federal agencies. Contacts regularly include meeting with contractors, equipment manufacturer's representatives, providers of services (e.g., software)

related to technological developments applicable to the project, and members of USACE technical committees. Contacts typically take place in moderately unstructured settings. Level 3.

The purpose of the contact is to plan, coordinate, or advise on work efforts, to exchange information, determine system administration requirements, coordinate study work processes and problem resolution matters, plan study processes, and provide progress reports. Additionally, contacts are to influence others to utilize methods and procedures developed or sell them on the use of system techniques, planned action, or resolve inequities and incompatible situations involved with the system(s). Contacts with HQ USACE are to coordinate the use of standard USACE-wide systems and obtain and provide information concerning the use of the systems. Level C

FACTOR 8. Physical Demands	FL 8-1	5 Points
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The work is primarily sedentary, with slight physical effort being required.

FACTOR 9. Work Environment	FL 9-1	5 Points
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Work is performed in an office setting with the normal risks involved and standard safety precautions being taken.

Total Points: 2890 (GS-12)  
GS-12 range is 2755 - 3150